

Title (en)
IMPROVED INVERSE TONE MAPPING METHOD AND CORRESPONDING DEVICE

Title (de)
VERBESSERTES INVERSES DYNAMIKKOMPRESSIONSVERFAHREN UND ZUGEHÖRIGE VORRICHTUNG

Title (fr)
PROCÉDÉ AMÉLIORÉ DE MAPPAGE INVERSE DE TONALITÉ ET DISPOSITIF CORRESPONDANT

Publication
EP 3729365 B1 20220209 (EN)

Application
EP 18834095 A 20181212

Priority
• EP 17306862 A 20171221
• US 2018065143 W 20181212

Abstract (en)
[origin: EP3503019A1] The present invention relates generally to the field of high dynamic range (HDR) imaging and addresses the way of expanding the dynamic range of low dynamic range images. The invention concerns a method comprising the steps of:- obtaining a predetermined expansion exponent map (E(p)) for said image (I);- determining, for each pixel (p) of the image (I), an expanded luminance value (Y(p)) by performing an exponentiation with an expansion exponent value determined from said predetermined expansion exponent map (E(p)) on a luminance value (Y(p)) of said pixel (p). According to the invention, the method further comprises the steps of- calculating, for said pixel (p) of the image (I), an expansion correcting value (()) by using a modulating function (()) that takes as input a value representative of the luminance of said pixel (p) and is an increasing function whose increase is higher for higher input values;- subtracting said expansion correcting value (()) from the expansion exponent value (E(p)) of the predetermined expansion exponent map (E(p)).

IPC 8 full level
G06T 5/00 (2006.01)

CPC (source: EP KR US)
G06F 17/11 (2013.01 - US); **G06T 5/40** (2013.01 - KR); **G06T 5/50** (2013.01 - US); **G06T 5/70** (2024.01 - KR); **G06T 5/92** (2024.01 - US); **G06T 5/94** (2024.01 - EP KR US); **G06T 2207/20012** (2013.01 - EP KR); **G06T 2207/20208** (2013.01 - EP KR US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3503019 A1 20190626; BR 112020009819 A2 20201013; CA 3086523 A1 20190627; CN 111480177 A 20200731; CN 111480177 B 20231020; EP 3729365 A1 20201028; EP 3729365 B1 20220209; KR 102567860 B1 20230818; KR 20200100077 A 20200825; US 11348210 B2 20220531; US 2020320672 A1 20201008; WO 2019125857 A1 20190627

DOCDB simple family (application)
EP 17306862 A 20171221; BR 112020009819 A 20181212; CA 3086523 A 20181212; CN 201880080048 A 20181212; EP 18834095 A 20181212; KR 20207017537 A 20181212; US 2018065143 W 20181212; US 201816955850 A 20181212